

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method for measuring and monitoring the setting of a crusher during the crushing process, in which method the erosion of the wearing parts of a crusher is measured and the setting of a crusher is adjusted based on the measurement result so as to maintain the setting at a predetermined value irrespective of the erosion of the wearing parts, **characterized** in that the measurement data indicating the amount of erosion in at least two of the wearing parts defining the setting of the crusher is transmitted wirelessly to the exterior side of the crusher.

2. (Previously Presented) The method of claim 1, **characterized** in that the erosion of each of the wearing parts defining the setting of the crusher is measured.

3. (Currently Amended) The method of claim 1 ~~or 2~~, characterized in that a wearing part replacement order is automatically issued as soon as the measurement data indicating the amount of erosion in the wearing parts reaches a predetermined threshold value.

4. (Previously Presented) An apparatus for measuring and monitoring the setting of a crusher during crushing, the apparatus comprising at least two crusher liners defining the setting of the crusher, at least one wear sensor mounted on first crusher liner, means for adjusting the crusher setting, at least one sensor mounted on said means for adjusting the crusher setting and an automatic control system of the crusher, in which apparatus said crusher's automatic control system receives a first input signal from a wear sensor mounted on the first liner of the crusher, said first input signal from a wear sensor mounted on the first

liner of the crusher, said first input signal being suitable for determination of amount of erosion in said liner, and a second input signal from said sensor mounted on the setting adjustment means of the crusher, said second input signal being suitable for determination of the relative position of the support surfaces of the crusher's wearing parts, whereby the crusher's automatic control system is able based on both input signals to adjust the crusher setting so as to maintain the setting of the crusher in its predetermined value irrespective of the erosion of the first wearing part, **characterized** in that at least one second wear measurement sensor is mounted on the other of the crusher liners defining the setting of the crusher together with the first wear liner, in which apparatus said crusher's automatic control system receives a third input signal from the second wear sensor, said third input signal being suitable for determination of amount of erosion in said second liner and that said sensors are equipped with means for transmitting the measurement data wirelessly to the exterior side of the crusher.

5. (Previously Presented) The apparatus of claim 4, **characterized** in that the crusher's automatic control system includes means for receiving wirelessly transmitted data.

6. (Currently Amended) The apparatus of claim ~~4 or 5~~, **characterized** in that said sensors are equipped with means for generating the electrical energy required for the operation of the sensors.

7. (Previously Presented) The apparatus of claim 6, **characterized** in that said means for generating the electrical energy required for the operation of the sensors comprise elements suitable for converting kinetic energy into electrical energy.

8. (Previously Presented) The apparatus of claim 6, **characterized** in that said means for generating the electrical energy required for the operation of the sensors comprises a piezoelectric device.

9. (Previously Presented) The apparatus of claim 6, **characterized** in that said means for generating the electrical energy required for the operation of the sensors comprise means for generating energy from an electromagnetic field surrounding the crusher.

10. (Currently Amended) A sensor suitable for use in ~~any one of the apparatuses disclosed in claims 4-9~~ the apparatus disclosed in claim 4 for measuring the amount of erosion in the wearing parts of a crusher, **characterized** in that the wearing portion of the sensor comprises a resistor network formed by a plurality of resistors in parallel, whereby the resistors along with the erosion of the wearing part in the crusher become erosively disconnected from the resistive network thus changing the overall resistance of the circuit feeding current to the wear sensor, whereby a measurement signal proportional to the amount of erosion in the wearing part is generated.

11. (Currently Amended) A sensor suitable for use in ~~any one of the apparatuses disclosed in claims 4-9~~ the apparatus disclosed in claim 4 for measuring the amount of erosion in the wearing parts of a crusher, **characterized** in that the wearing portion of the sensor comprises a resistor network formed by a plurality of resistors in series, whereby the resistors along with the erosion of the wearing part in the crusher become erosively disconnected from the resistive network thus changing the overall resistance of the circuit feeding current to the wear sensor, whereby a measurement signal proportional to the amount of wearing part erosion is generated.

12. (Currently Amended) A sensor suitable for use in ~~any one of the apparatuses disclosed in claims 4-9~~the apparatus disclosed in claim 4 for measuring the amount of erosion in the wearing parts of a crusher, **characterized** in that the sensor is implemented such that the sensor utilizes acoustic waves.

13. (Previously Presented) The sensor of claim 12, **characterized** in that the sensor is an ultrasonic sensor.

14. (Previously Presented) The sensor of claim 12, **characterized** in that the sensor is implement using MEMS technology in the sensor construction.

15. (Previously Presented) The sensor of claim 14, **characterized** in that the sensor is an acoustic emission detecting sensor.

16. (Currently Amended) The sensor of ~~any one of claims 12-15~~claim 12, **characterized** in that the sensor incorporates separate means for emitting and receiving a sensing impulse.

17. (Currently Amended) A sensor suitable for use in ~~any one of the apparatus disclosed in claims 4-9~~the apparatus disclosed in claim 4 for measuring the amount of erosion in the wearing parts of a crusher, **characterized** in that the sensor is based on a strain gage element.

18. (Previously Presented) The sensor of claim 17, **characterized** in that the sensor is also capable of measuring forces imposed on the wearing part during crushing.

19. (Currently Amended) The sensor of claim 17 ~~or 18~~, **characterized** in that the sensor incorporates means for storing and wirelessly transmitting the identification data of the wearing part.

20. (Currently Amended) The sensor of ~~any one of claims 17-19~~ claim 17, **characterized** in the RF technology is used in the implementation of at least a portion of the sensor elements.